JAMECO
ELECTRONIC COMPONENTS
COMPUTER PRODUCTS

Part No. 101354
Product No. SNP9040
Skynet 41 Watt Switching Power Supply

1355 Shoreway Rd., Belmont, CA 94002 • Tel: 415-592-8097 • Fax: 415-592-2503 • BBS: 415-637-9025

Features:

Agency Approvals

Output: +5VDC @ 3A; +12VDC @ 2A;
-5VDC @ 0.1A; -12VDC @ 0.1A

Input: 115VAC @ 1A or 230VAC @ 0.5A
50/60 Hz

Auto switch input

Molex style input & output connectors

Size: 3"L x 5"W x 1"H

Weight: 0.45 lbs.

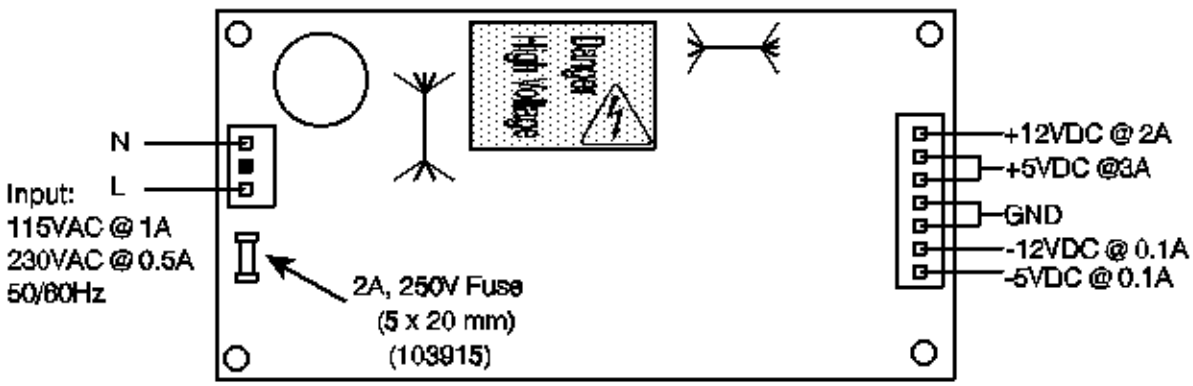
Compatible Products

Input mating connector: 104432 - 3 pin female connector housing

Output mating connector: 104740 - 7 pin female connector housing

Note: use 104774 pins and 99442 crimp tool for both connectors

Fuse: 2A, 250V, 5 x 20 mm (103915)



Suggested minimum load is 10% of the rated output current for each output

1.0 INTRODUCTIONS

The SNP-9040 is a 40 Watts quad outputs universal input switching power supply specially designed for microprocessor based applications. Its over voltage crowbar protection to avoid damaging the external ciucuits, and the hiccup mode function against short circuit or over load condition are perfect features.

2.0 INPUT SPECIFICATIONS

2.1 Input Voltage

The range of input voltage is from 90VAC to 264VAC.

2.2 Input frequency

The range of input frequency is from 47HZ to 63HZ.

2.3 Input current

The maximum input current is 1A at 115VAC or 0.6A at 230VAC.

2.4 Inrush current

The inrush current will not exceed 30A at 115VAC input or 60A at 230V AC input , cold start, 25°C.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

output	min. load	rated load	peak load	voltage accuracy
+5V	0A	3A	6A	4.95V to 5.05V
+12V	0A	2A	4A	11.4V to 12.6V
-12V	0A	0.3A	0.5A	-11.4V to -12.6V
-5V	0A	0.3A	0.5A	-4.5V to -5.5V

The adjustable range of +5V output is around 4.75V to 5.75V. The output range of +12V, -12V, -5Vwill move up and down with +5V setting. At factory, all outputs in 60% rated load condition, the +5V output is set to between 4.95V and 5.05V, and the other outputs are checked to be within the specified voltage accuracy range.

3.2 Ripple and noise

The peak to peak ripple and noise for +5V, -5V is less than 50mV, for the +12V, -12V are less than 100mVat rated load, nominal line. Measuring is done by 15 MHz band width limited oscilloscope and terminated each output with a 0.47uF capacitor

3.3 Line regulation

The line regulation for +5V is less than + - 1%, for +12V is less than +-2%, for -12V, -5V is less than +-3% while measuring at rated load and + - 10% of input voltage changing.

3.4 Load regulation

The load regulation for +5V, +12V are less than + -3%, for -12V, -5V is less than + -5%, measuring is done by changing the measured output load+ -40% from 60% rated load, and keep other outputs at 60% rated load.

4.0 GENERAL FEATURES

4.1 Efficiency

The efficiency is higher than 70% while measuring at nominal line and rated load.

4.2 Hold up time

The hold up time is longer than 20ms typical at 115VAC input and rated load,which is measured from the and of the last charging pulse to when the main output drops down to 95% output voltage.

4.3 Protection

For some reason the power supply fails to control itself, the build-in over voltage protection circuit will shut down the outputs to avoid damaging external circuits. The trip point of crowbar circuit is around 5.7V to 6.7V. The power supply will go into hiccup mode against short circuit or over load conditions, and will auto-recovery while faulty conditions removed.

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature

0°C to 50°C

5.2 Storage temperature

-20°C to 85°C

5.3 Altitude

Will operate properly at any altitude between 0 to 10000 ft.

6.0 INTERNATIONAL STANDARDS

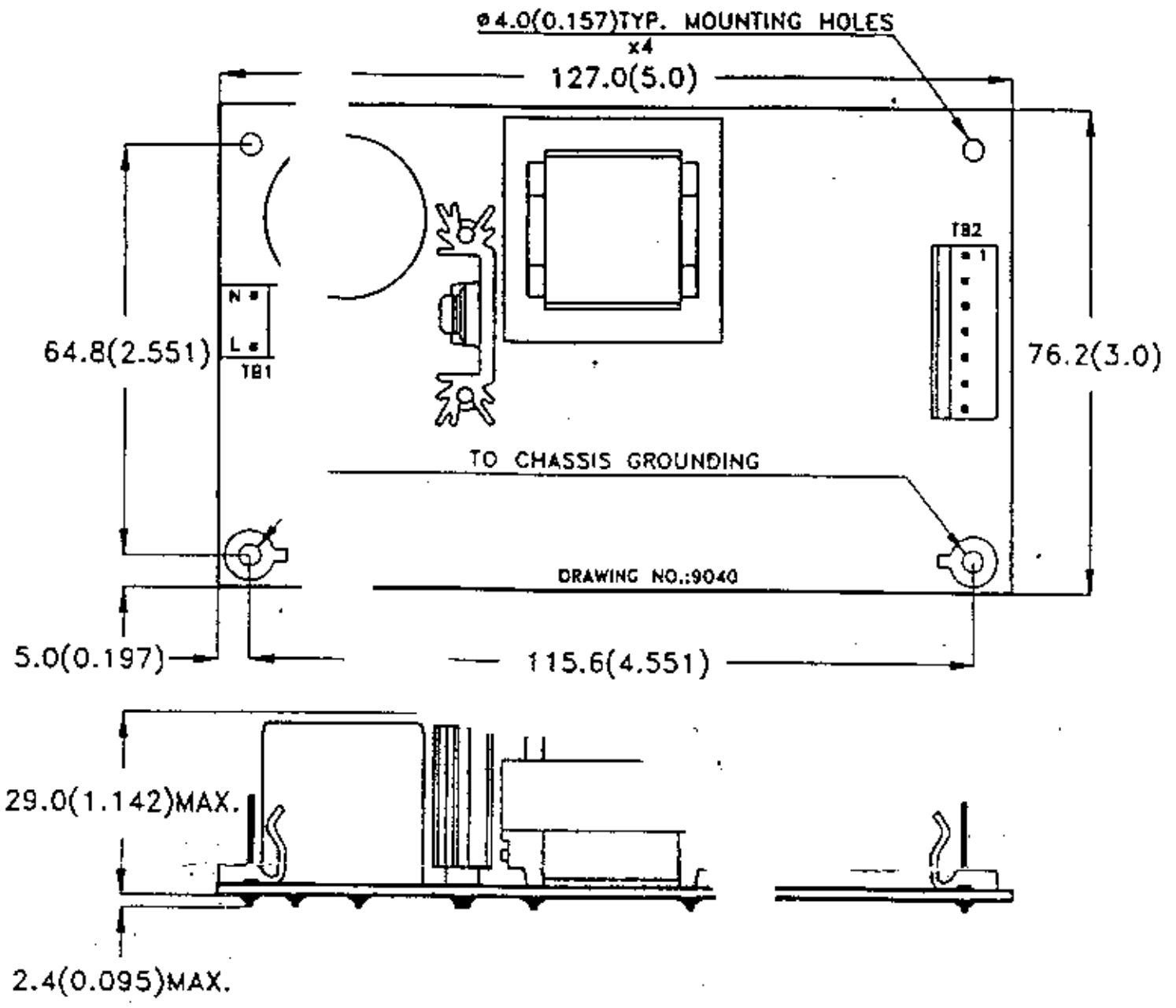
6.1 Safety standards

Designed to meet the following standards
UL 1950 D3
CSA 22.2 NO. 234
VDE EN 60 950

6.2 EMI standards

Designed to meet the following conducted limits
FCC docket 20780 curve "B"

7.0 MECHANICAL SPECIF[illegible]TION



7.1 Dimensions

Dimensions shown in mm (inch) as above. Tolerance spec[illegible]d is + - 0.4 mm.

7.2 Connectors

TB1-AC input : Molex 5277-2 or equivalent
TB2-DC output : Molex 5273-7 or equivalent

7.3 DC output pin assignment

pin	1	+12V
	2	+5V
	3	+5V
	4	GND
	5	GND
	6	-12V
	7	-5V